

## **Supporting Information**

### **Therapeutic Potential of Nitazoxanide; an Appropriate Choice for Repurposing versus SARS-CoV-2?**

Andrew V. Stachulski<sup>1\*</sup>, Joshua Taujanskas<sup>1</sup>, Sophie L. Pate<sup>1</sup>, Rajith K. R. Rajoli<sup>2</sup>, Ghaith Aljayyousi<sup>3</sup>, Shaun H. Pennington<sup>3</sup>, Stephen A. Ward<sup>3</sup>, Weiqian David Hong<sup>1</sup>, Giancarlo A.

Biagini<sup>3</sup>, Andrew Owen<sup>2</sup>, Gemma L. Nixon<sup>1</sup>, Suet C. Leung<sup>1</sup> and Paul M. O'Neill<sup>1\*</sup>

<sup>1</sup>Department of Chemistry, University of Liverpool, Liverpool, L69 7ZD, UK

<sup>2</sup>Department of Molecular and Clinical Pharmacology, Materials Innovation Factory, University of Liverpool, Liverpool, L7 3NY, UK

<sup>3</sup>Centre for Drugs and Diagnostics. Department of Tropical Disease Biology, Liverpool School of Tropical Medicine, Liverpool L3 5QA, UK

#### **Author for correspondence:**

Professor Paul M. O'Neill Department of Chemistry  
The Robert Robinson Laboratories The University of Liverpool Liverpool L69 3BX  
United Kingdom  
Telephone: 0151 794 3553 E-mail: pmoneill@liverpool.ac.uk

## Supporting Methods

### **FIGURES**

Figure S1

## Supporting Methods

### SARS CoV2 Antiviral Determination

Compound activity was assessed in 96-well plates using VERO E6 cells. Cells were seeded and allowed to reach 100% confluence overnight. Media was removed and cells treated with serially-diluted compounds in minimal medium at 25.00  $\mu\text{M}$ , 8.33  $\mu\text{M}$ , 2.78  $\mu\text{M}$ , 0.93  $\mu\text{M}$ , 0.31  $\mu\text{M}$ , 0.10  $\mu\text{M}$  and 0.03  $\mu\text{M}$  or control media, as appropriate. DMSO was maintained at 0.25% for all experimental and control wells. The plates were then incubated at 37°C with 5%  $\text{CO}_2$  for 2 hours. The minimal medium containing the experimental compounds and the control media was then removed. Wells were then treated with 50  $\mu\text{L}$  minimal medium containing SARS- CoV-2 (MOI of 0.05; SARS-CoV-2/Human/Liverpool/REMRQ0001/2020), 100  $\mu\text{L}$  2 $\times$  semi-solid media (EMEM supplemented with 4% HI FBS and 0.1% agarose) and then 50  $\mu\text{L}$  minimal medium containing experimental compounds and control media added, as appropriate. After 48 hours, paraformaldehyde was added to each well (4% final concentration) and the plate incubated for 1 hour at room temperature. The medium was removed, cells were stained with crystal violet and washed three times with sterile water. Cytopathic viral activity was determined by measuring absorbance at 590 nm using a Varioskan LUX microplate reader (Thermo Fisher Scientific). Data were expressed as percentage inhibition of viral growth relative to the uninfected/untreated control (100% inhibition of viral growth) and the infected/untreated control (0% inhibition of viral growth).

**Figure S1 Dose Response Curves for Nitazoxanide and Tizoxanide versus SARS CoV2 In vitro**

